

REMARKS

Claims 1-15, 17-20 and 22 are in this application and are presented for consideration. By this amendment, Applicant has revised claim 1 to clarify the subject matter of the claimed combination. Claim 17 has been revised to present a clarification and also to highlight the curved section having a radius of curvature which progressively decreases from a location adjacent to the holding section to an expanded diameter end (see for example page 10 of the specification). Claim 22 has been added which highlights the decreasing radius of curvature from adjacent the holding section to the expanded diameter end wherein this is particularly a first larger radius of curvature adjacent to the holding section followed by a second smaller radius of curvature adjacent to the expanded outer diameter end. Favorable consideration of the claims is requested.

Claims 1-8 and 17-21 have been rejected as being obvious based on the teachings of U.S. 3,934,902 (McNamee) in view of FR 1 286 787 (FR 787).

The references together fail to teach and fail to suggest each of the features of the claimed invention.

McNamee is cited for showing a support area surrounding the flexible hose with some of the features as claimed. McNamee does provide a discussion as to halves 18 and 20 which together form a split ring 22. Although the surface is not shaded, apparently an end face of one half 18 is shown with the inner surface being corrugated at 24 to receive the outer surface of the tube 12. The halves 18 and 20 have holes or projections to connect and the combined ring has outer threads to engage member 50. The reference does not teach or suggest a support area having a trumpet shape extension (namely with a reduced diameter at one end and then the

large diameter at another end) as well as the inner curved surface. It could be said that the McNamee reference teaches a holding area but not the claimed support area.

FR '787 discloses a cylindrical bush or sleeve that has one end with an inner wall with a curvature 12.

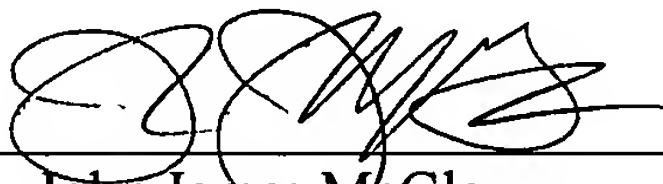
The reference does not teach the trumpet-like structure, namely the structure does not have one end of a smaller outer diameter and another end with a larger outer diameter (trumpet-like shape). Applicant is also claiming the inner curvature but the trumpet-like structure necessarily has an outer change in diameter. The outer shape is not cylindrical. Instead one end has a larger diameter than an end close to the holding area. This is a structure which starts from the cylindrical holding area region and proceeds in a trumpet-like shape to an enlarged end. This structure is clearly neither taught nor suggested by FR '787.

New claim 17 highlights the structure wherein the inner surface has a progressively decreasing radius of curvature. This can be appreciated from, for example, Figure 2 where it can be noted that the continuous curvature starts with a relatively large radius of curvature and this progressively decreases. As highlighted in the specification, this presents particular advantages in supporting a hose, for example for robots or industrial robots and the like, so as to reduce wear, even in situations with rotation as well as lateral or bending movements. The structure has very little friction with very little wear and presents the support in a manner that avoids kinking and other difficulties which have been observed in prior art arrangement. The decreasing radius is also highlighted in revised claim 2 as well as new claim 22. Claim 22 highlights the larger radius of curvature section adjacent to the holding section followed by a smaller radius of curvature section adjacent to the expanded outer diameter end. This provides

similar significant advantages including a region with a very subtle curve, providing the necessary support function following by a much more drastic curve, to avoid friction, wear and kinking problems as mentioned. Only the invention provides the particular combination of features wherein these have proved to be particularly advantageous.

Applicant respectfully requests that the Examiner favorable consider the claims as now presented.

Respectfully submitted
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